

EXHIBIT A

**Excerpts from Rebuttal Report of
Professor Owen Astrachan submitted
on March 13, 2020**

PUBLIC REDACTED VERSION

**UNITED STATES DISTRICT COURT
DISTRICT OF NEVADA**

ORACLE USA, INC., et al.,

Plaintiffs,

v.

RIMINI STREET, INC., et al.,

Defendants.

Case No. 2:10-cv-00106-LRH-VCF

**REBUTTAL EXPERT REPORT
OF PROFESSOR OWEN ASTRACHAN**

March 13, 2020

HIGHLY CONFIDENTIAL—ATTORNEYS' EYES ONLY



Professor Owen Astrachan
Dated: March 13, 2020

III. EXECUTIVE SUMMARY

16. I disagree with Ms. Frederiksen-Cross's opinions, which I believe are based on unfounded assumptions, fundamental errors, and misconstructions of the evidence, and are thus fundamentally unreliable.

1. RIMINI'S PROCESS 2.0 IS FUNDAMENTALLY DIFFERENT FROM THE PROCESSES ADJUDICATED IN *RIMINI I*

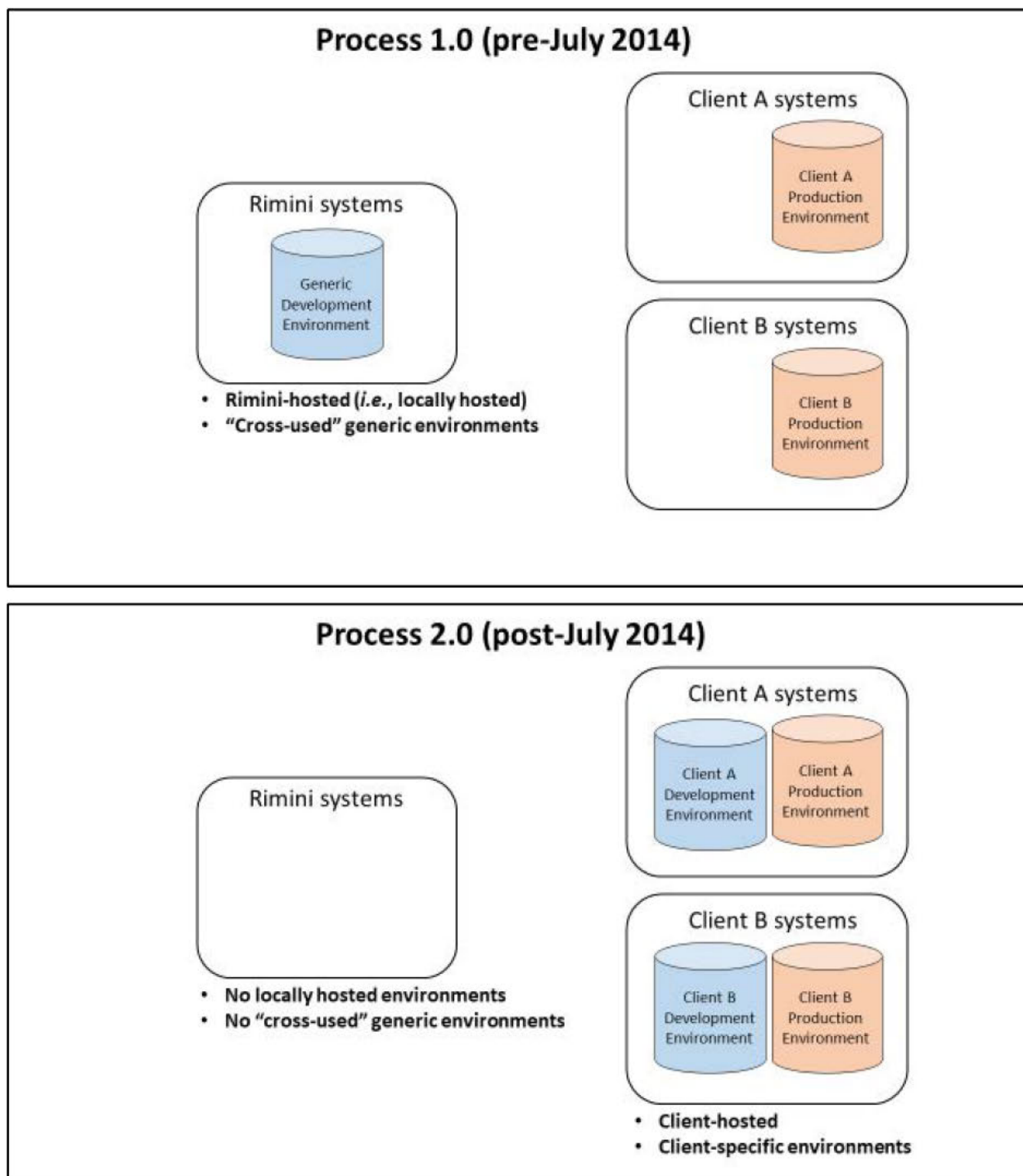
17. By the end of July 2014, Rimini completed its transition to Process 2.0, which I analyzed extensively in my *Rimini II* reports.

18. It is my opinion that Rimini's Process 2.0, which includes processes for PeopleSoft and JD Edwards, is fundamentally different from the processes that were litigated and adjudicated in this matter (*i.e.*, "Process 1.0").

19. The following table identifies these fundamental differences:

Process 1.0 (pre-July 2014)	Process 2.0 (post-July 2014 to present)
<ul style="list-style-type: none"> • Clients' Oracle software development environments were located on Rimini's systems (<i>i.e.</i>, they were "locally hosted" by Rimini); • Clients' Oracle software could be intermixed rather than kept separate for each client; • Rimini cloned Oracle software environments of Client A to give to Client B (where Client B also had a license for such software); • Rimini created and used generic Oracle development environments, not tied to any particular client, to develop updates (often in the form of Oracle modified files and therefore containing Oracle code) that Rimini would then send to multiple clients—conduct which Oracle called "cross-use." 	<ul style="list-style-type: none"> • Every client has its own separate licensed Oracle software environments; • Each client's environments are located on that client's computer systems, which that client controls; • There are no Oracle software environments on Rimini's systems; • Oracle software is not permitted on Rimini's systems; • To provide support for a particular client, Rimini remotely accesses each client's separate software environments and implements updates and other fixes using that client's Oracle software to support that particular client; • Files containing Oracle code are not transferred from one client to another, or from clients to Rimini.

20. These fundamental differences are depicted in the graphic below:



21. Although Rimini has made certain other changes to its processes following the Injunction, which are described further below, the Process 2.0 model remains unchanged.

[REDACTED]

[REDACTED]

3. MS. FREDERIKSEN-CROSS'S OPINIONS ARE BASED ON A SERIES OF FUNDAMENTAL ERRORS

30. Ms. Frederiksen-Cross's opinions are based on a series of fundamental errors that are repeated throughout her report. I summarize and categorize them below:

31. [REDACTED]

¹² See, for example, *id.* ¶¶ 272, 277.

¹³ See, for example, *id.* ¶¶ 132, 150, 155, 157–60, 218, 227, 274, 280, 282, 302, 304, 338.

¹⁴ See, for example, *id.* ¶¶ 326, 329.

¹⁵ See, for example, *id.* ¶ 274.

¹⁶ See, for example, Injunction ¶¶ 2 (applying to reproducing, preparing derivative works from, or distributing certain Oracle software or documentation), 6–10 (certain prohibitions on copying, distribution and use of PeopleSoft software), 7–10 (certain prohibitions on copying, distribution and use of JD Edwards software).

32.

[REDACTED]

¹⁷

[REDACTED]

33.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁷ Frederiksen-Cross Post-Injunction Rpt., ¶ 204.

¹⁸ *Id.* ¶ 304.

¹⁹ *See*, for example, Injunction ¶¶ 4, 6.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

²⁰ Frederiksen-Cross Post-Injunction Rpt. ¶¶ 332–33.

²¹ *Id.* ¶ 183.

²² *Id.* ¶ 206.

²³ *Id.* ¶ 205.

[REDACTED]

[REDACTED]

²⁴ *Id.* ¶ 181.

²⁵ *Id.* ¶ 40.

²⁶ Deposition of Barbara Frederiksen-Cross, Sept. 19, 2018, pp. 143–44 (emphasis added).

[REDACTED]

[REDACTED]

[REDACTED]

²⁷ *Id.* at pp. 213, 216. Ms. Frederiksen-Cross suggested that such an engineer should “go and confer with counsel and find out what the legal answer is.”

²⁸ Frederiksen-Cross Post-Injunction Rpt., ¶ 102.

²⁹ *Id.* ¶ 333.

[illegible]

45. In addition to the fundamental errors discussed above, Ms. Frederiksen-Cross's opinions are also a result of numerous unfounded assumptions. I do not agree with several of these assumptions and find them to be unsupported, illogical, and inconsistent with other facts of the case. Below I discuss the problems with Ms. Frederiksen-Cross's assumptions, as well as the assumptions and understandings I use for my analysis.

[illegible]

³³ Deposition of Richard Allison, Mar. 28, 2018, pp. 86–87.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

³⁴ Frederiksen-Cross Post-Injunction Rpt., ¶ 15.

³⁵ *Id.* ¶ 16.

³⁶ *Id.* ¶ 17.

³⁷ *Id.* ¶ 16.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

³⁸ See, for example, *id.* ¶ 380; R2 Frederiksen-Cross Supp. Rpt., ¶¶ 382, 390–95, 722.

³⁹ Deposition of Barbara Frederiksen-Cross, Sept. 19, 2018, p. 146; *see id.* at p. 165.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁴⁰ *Id.* ¶ 17 (emphasis added).

⁴¹ Injunction ¶ 6.

⁴² Deposition of Barbara Frederiksen-Cross, Sept. 19, 2018, pp. 143–44.

⁴³ *Id.* at p. 151.

[REDACTED]

[REDACTED]

[REDACTED]

⁴⁴ *Id.* at p. 163.

⁴⁵ *Id.* at pp. 163–64.

⁴⁶ *Id.* at p. 186 (emphasis added).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁴⁷ R2 Frederiksen-Cross Supp. Rpt., ¶ 217.

⁴⁸ Deposition of Barbara Frederiksen-Cross, Sept. 19, 2018, p. 175.

⁴⁹ *Id.* at p. 194.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁵⁰ Deposition of Barbara Frederiksen-Cross, Sept. 19, 2018, pp. 248–50.

⁵¹ *Id.* at pp. 233–34; *see also id.* pp. 223–30.

⁵² *Id.* at p. 171.

⁵³ *Id.*

⁵⁴ *Id.*

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

⁵⁵ Deposition of Barbara Frederiksen-Cross, Sept. 19, 2018, p. 213; *see id.* at p. 216 (similar).

⁵⁶ For example, Frederiksen-Cross Post-Injunction Rpt., ¶¶ 204

⁵⁷ Trial Tr., p. 192.

5. RIMINI'S POST-INJUNCTION JD EDWARDS SUPPORT PRACTICES

138. I described JD Edwards support practices in my prior reports.¹¹⁸

VI. RIMINI'S PROCESS 2.0 IS FUNDAMENTALLY DIFFERENT FROM THE PROCESSES ADJUDICATED IN THIS CASE

143. Rimini’s Process 2.0 (and thus post-Injunction) processes are fundamentally different than the processes that were adjudicated in this case at summary judgment in 2014, and at trial in 2015 (practices dating back to 2011 and prior), *i.e.*, Rimini’s Process 1.0.

1. RIMINI'S PROCESS 1.0

144. Under Process 1.0, Rimini maintained large amounts of Oracle software and documentation on its servers and did not segregate or “silo” that software by client. I understand that Rimini believed this was permissible because all of its clients held a license to the Oracle

¹¹⁸ R2 Astrachan Opening Rpt., ¶¶ 129–37; R2 Astrachan Rebuttal Rpt., ¶¶ 534–56.

¹¹⁹ RSI006850025, Deposition of Craig Mackereth, Jan. 17, 2020, Ex. 1833 [REDACTED]
[REDACTED]; Rimini's Corrected First Supplemental Response to Oracle
Supplemental Interrogatory No. 1, July 18, 2019, pp. 6–8.

¹²⁰ Deposition of Craig Mackereth, Jan. 17, 2020, pp. 243–44.

software. Rimini thus did not segregate any particular client's software from the (same) software of other clients. Oracle contended that Rimini's practice of maintaining copies of its clients' software on its own systems—called “local hosting”—violated its license agreements.¹²¹ Oracle also argued that even if two clients are licensed to the same software, use of Client A's software to support Client B, violated the licenses, an argument it dubbed “cross-use.”¹²²

145. As alleged by Oracle at trial, Rimini “cloned” entire client software environments. That is, if Client B needed to have a development environment containing its Oracle software set up, Rimini might simply copy Client A's development environment for use with Client B (under the theory that the two clients had the same license and were entitled to the same software). Oracle's expert at trial, Professor Randall Davis, testified that Rimini cloned 478 software environments in this manner, not counting instances of Oracle Database.¹²³ This was alleged to be “cross-use” because Rimini copied one client's software to create an environment for a different client, and constituted local hosting because all of these environments were maintained on Rimini's systems. As testified to by Professor Davis, Rimini also made 13,500 backup copies of these environments.¹²⁴

146. Professor Davis also testified that Rimini maintained nearly 600,000 copies of Oracle documentation on its systems and used this as a “library” to provide support to clients.¹²⁵

147. Professor Davis also testified about “cross-use.” He showed the following graphic to describe “cross-use” and testified as follows:¹²⁶

¹²¹ *Rimini I*, 879 F.3d at 959.

¹²² *Id.* at 956 (stating that “‘cross-use,’ generally speaking, is the creation of development environments, under color of a license of one customer, to support other customers.”).

¹²³ Trial Tr., p. 174.

¹²⁴ *Id.* at p. 184.

¹²⁵ *Id.* at p. 186.

¹²⁶ *Id.* at p. 192.



Imagine this software support person is using software that was created for Customer A, but he's using it to support Customer B because Customer B is on the phone. That's what we mean by cross-use, using software created for one customer for another customer's benefit.

148. He was then asked whether that behavior is “consistent with the idea of keeping something in a silo?” to which he answered, “No, it is not.”¹²⁷ He testified that there were “two broad categories” of “cross-use”: “cloning” and “updates.”¹²⁸ Cloning refers to the cloning of entire development environments to provide support to a different client, as discussed above.¹²⁹

149. With respect to updates, Professor Davis testified that Rimini maintained generic environments associated with a particular software version, which it would use to develop fixes and updates to Oracle software files, to be sent out to *all* clients with that version. He testified that:

So they had an idea of an environment, let's say for the PeopleSoft 881, and they'd have an environment which had originally been built for this particular customer to use as 881, but they would then use that routinely as a place in which they could test and develop fixes to that version of the software.¹³⁰

¹²⁷ *Id.*

¹²⁸ *Id.*

¹²⁹ *Id.* at p. 195.

¹³⁰ *Id.* at pp. 202–03.

150. Professor Davis noted in his expert report that Rimini's process was to use these generic development environments "independent of whether the fix being developed was required for the customer for which the environment had originally been created."¹³¹ He also stated in his report that the use of generic environments and then copying files from those environments to distribute to customers, "meant that RSI was distributing to its customers a file containing a large percentage of the Oracle code copied verbatim"—*i.e.*, copyrighted Oracle code as compared to Rimini code.¹³²

151. Professor Davis then distinguished this process of having a generic environment, or a "single dev environment per release," as he put it,¹³³ from a process wherein each client has its own development environment:

152. In response to the question "is [having a single development environment per PeopleSoft release] different than envisioning a dev environment for each custom client?," he responded:

Well, if you talk about an environment for each client, then you need one, to put it in slightly different terms, for every different customer and every different customer's environment, as opposed to one per version of the software.

So if one version of the software is used by 10 clients, and you only have one dev environment for the version of the software as opposed to one dev environment for every client who is using the software, you've saved yourself a lot of time, money, and effort.¹³⁴

153. Thus, the key features of Process 1.0 included the following elements:

- a. Clients' Oracle software development environments were located on Rimini's systems (*i.e.*, they were locally hosted by Rimini);
- b. Clients' Oracle software could be intermixed rather than kept separate for each client;

¹³¹ R1 Expert Report of Randall Davis, May 2012, p. 40.

¹³² *Id.* at p. 49.

¹³³ Trial Tr. p. 204.

¹³⁴ *Id.* at pp. 204–05.

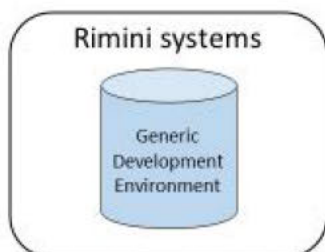
- c. Rimini cloned Oracle software environments of Client A to give to Client B (where Client B also had a license for such software);
- d. Rimini created and used generic Oracle development environments, not tied to any particular client, to develop updates (in the form of Oracle modified files and therefore containing Oracle code) that Rimini would then send to multiple clients—conduct which Oracle called “cross-use.”

2. RIMINI’S PROCESS 2.0

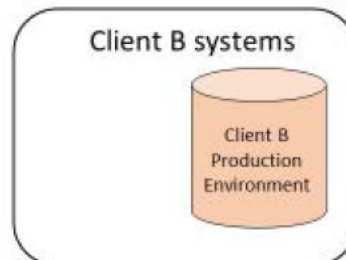
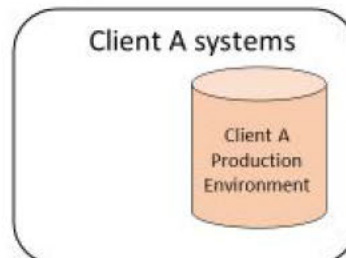
154. Rimini’s Process 2.0, described earlier, is fundamentally different from Process 1.0. The fundamental differences include:

- a. Every client has its own licensed Oracle software environments;
- b. Each client’s environments are located on that client’s computer systems, which that client controls;
- c. There are no Oracle software environments on Rimini’s systems;
- d. Oracle software is not permitted on Rimini’s systems;
- e. To provide support for a particular client, Rimini remotely accesses each client’s separate software environment and implements updates and other fixes using that client’s Oracle software to support that particular client;
- f. Files containing Oracle code are not transferred from one client to another, or from clients to Rimini.

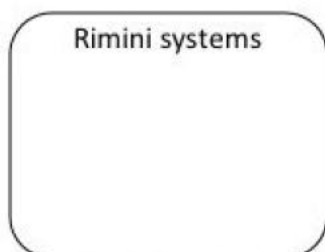
Process 1.0 (pre-July 2014)



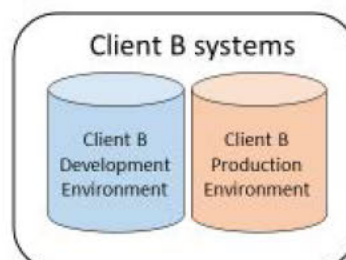
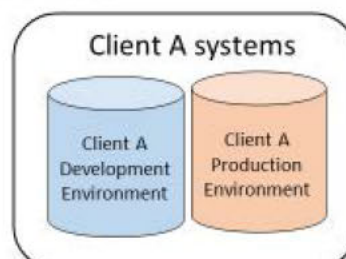
- Rimini-hosted (*i.e.*, locally hosted)
- “Cross-used” generic environments



Process 2.0 (post-July 2014)



- No locally hosted environments
- No “cross-used” generic environments



- Client-hosted
- Client-specific environments

3. ORACLE’S CRITICISMS OF PROCESS 2.0 ARE ENTIRELY DIFFERENT FROM THE ISSUES LITIGATED ON SUMMARY JUDGMENT AND AT TRIAL IN *RIMINI I*

155. As I understand it, the Injunction addresses and prohibits these Process 1.0 processes. For example, Rimini’s process of locally hosting PeopleSoft environments was enjoined by Paragraph 5 of the Injunction, which prohibits Rimini’s use of PeopleSoft software other than on “a specific licensee’s own computer systems.” As another example, the Injunction prohibits the Process 1.0 process of using a “generic” environment not associated with any specific client to create updates and then sending those updates to one or more different clients.

[REDACTED]

[REDACTED]

158. Further, in this proceeding, as in *Rimini II*, it is undisputed that Rimini does not have any Oracle software environments on its systems. Rimini also does not develop modified Oracle files in generic environments to then copy and distribute to clients, and for the most part, this is undisputed.

[REDACTED] c

¹³⁵ Tr. of May 25, 2016 Hearing, p. 143 (Oracle’s counsel acknowledging that “cloud computing is at issue in *Rimini II* and it wasn’t at issue in *Rimini I*.”).

[REDACTED] When Rimini implements an update for Client A using Client A's software, in Client A's environment, it learns how to solve the problem and may document its experience and knowledge. It can then implement the update for Client B, using Client B's software, in Client B's environment faster than it performed the update for Client A because it has already solved the problem once. [REDACTED]

[REDACTED]

[REDACTED]

160. Based on my review of the record, Rimini's use of its own knowledge and experience was not litigated in *Rimini I*. *Rimini I* involved the explicit copying of one client's Oracle software and providing that software to a different client, which is not at issue here.

VII. THE CLIENTS' "OWN COMPUTER SYSTEMS" PROVISION

1. CLIENTS' CLOUD-HOSTED ENVIRONMENTS, INCLUDING WINDSTREAM, ARE THE CLIENTS' "OWN COMPUTER SYSTEMS"

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

162. The Injunction states that "Rimini shall not reproduce, prepare derivative works from, or use PeopleSoft software or documentation on, with, or to any computer systems other than a specific licensee's own computer systems."¹³⁹

¹³⁶ I understand that Windstream now operates as TierPoint. For consistency, I refer to the company as Windstream.

¹³⁷ Frederiksen-Cross Post-Injunction Rpt., ¶ 14.

¹³⁸ Deposition of Barbara Frederiksen-Cross, Sept. 19, 2018, pp. 253–54.

¹³⁹ Injunction ¶ 5.

2. ALLEGED ORACLE CODE OR DOCUMENTS ON RIMINI'S SYSTEMS

[REDACTED]

[REDACTED]

[REDACTED]

¹⁶³ *Id.* ¶ 185.

¹⁶⁴ *Id.* ¶ 372 [REDACTED]

¹⁶⁵ *Id.* ¶ 185.

¹⁶⁶ *Id.*

¹⁶⁷ *Id.* ¶ 186.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁶⁸ *Id.* ¶¶ 186, 286.

¹⁶⁹ *Id.* ¶ 187.

¹⁷⁰ I discussed [REDACTED] at length in my *Rimini II* Rebuttal Report (¶¶ 189–411) and incorporate that discussion by reference here.

[REDACTED]

[REDACTED]

¹⁷¹ <https://www.ssa.gov/employer/efw/19efw2.pdf#zoom=100>.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁷² I note that the Rimini procedure is titled

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁷³ Frederiksen-Cross Post-Injunction Rpt., ¶ 286.

¹⁷⁴ ECF No. 1297 (Rimini Opp. to Mtn. to Compel), pp. 16–23; ECF No. 1297-4 (Mendillo Decl.).

¹⁷⁵ Frederiksen-Cross Post-Injunction Rpt., ¶ 189.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁷⁶ *Id.* Ex. 47.

¹⁷⁷ [REDACTED]

[REDACTED]

[REDACTED]

¹⁷⁸ *Id.*

¹⁷⁹ *Id.*

¹⁸⁰ Frederiksen-Cross Post-Injunction Rpt., ¶ 191.

¹⁸¹ *Id.*

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

¹⁸² R2 Astrachan Rebuttal Rpt., ¶¶ 207–15.

¹⁸³ Frederiksen-Cross Post-Injunction Rpt., ¶ 192.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

XI. ALLEGED “DISTRIBUTION” OF SOFTWARE

1. ALLEGED ACTS OF DISTRIBUTION

[REDACTED]

³¹¹ See, for example, Frederiksen-Cross Post-Injunction Rpt., ¶ 306 (identifying the checking in and out of source code during use of Object Management Workbench and the promotion of objects).

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

³¹² *Id.* ¶¶ 332–33.

[REDACTED]

2.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

³¹³ In one instance, Ms. Frederiksen-Cross alleges t

[REDACTED]